



Economic Impact Analysis Virginia Department of Planning and Budget

9 VAC 25-430 – Roanoke River Basin Water Quality Management Plan
Department of Environmental Quality
09/26/2000

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 9-6.14:7.1.G of the Administrative Process Act and Executive Order Number 25 (98). Section 9-6.14:7.1.G requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. The analysis presented below represents DPB's best estimate of these economic impacts.

Summary of the Proposed Regulation

In response to the requests by Chase City, the proposed regulation increases the wasteload allocations in the plan for the Chase City Municipal Sewage Treatment Plant (STP).

Estimated Economic Impact

Chase City Municipal STP is located in Mecklenburg County and discharges its wastewater to Little Bluestone Creek. Operations of the STP are conducted under the Virginia Pollutant Discharge Elimination System and a permit is required. Conditions of the permit are based on a wasteload allocation specified in the Roanoke River Basin Water Quality Management Plan. A 1975 study established the waste load allocations for the Chase City Municipal STP. The study employed a multiple regression equation estimated from the data on various waterbodies in the Tennessee Valley.

The Department of Environmental Quality (DEQ) indicated that the Chase City Municipal STP has been experiencing some difficulty in complying with its permit. Recently,

the town requested increased wasteload allocations for their STP. Their request is based on a 1997 simulation study performed by B&B Consultants hired by Chase City. The study used site-specific data from an intensive stream monitoring survey and other field investigations conducted by DEQ staff. The methodology and the results of the study were reviewed and found appropriate by DEQ. Additionally, DEQ believes that the results of the new study are more accurate than the results of 1975 study because of the site-specific data employed and the sophisticated nature of the study.¹

The proposed changes to this regulation incorporate the results of the new study and increase the wasteload allocations in the plan for the Chase City Municipal STP. Thus, Chase City Municipal STP will be allowed to discharge more pollutant into Little Bluestone Creek than the current level and still comply with the water quality standards.

In the absence of the proposed changes, Chase City Municipal STP would be frequently out of compliance with its permit and could be subject to a fine of \$25,000 per day.² Chase City requested the increase in its wasteload allocations because of the difficulty in complying with the permit.

Another option for Chase City Municipal STP would be upgrading the plant. This option would require building a filter facility. DEQ indicated that upgrading the plant would cost at least \$100,000.

According to DEQ, the water quality would be slightly lower than its current level after increasing the wasteload allocations; however, the water quality standards will still be met. DEQ believes that the additional permitted discharge would not significantly impact the natural ecosystems. Thus, the costs of the proposed changes to the regulation are expected to be small.

In short, the proposed regulation is likely to produce benefits by avoiding the potential non-compliance fines or the costs associated with upgrading the current STP. Negative effects on the natural ecosystems are expected to be minor. Thus, it is reasonable to expect that the proposed regulation have the potential to reap some net economic benefits.

¹ The Virginia Institute of Marine Science indicated that the site-specific data used in the study would increase the accuracy of the method.

² Source: Department of Environmental Quality

Businesses and Entities Affected

The entity primarily affected will be the Chase City Municipal STP.

Localities Particularly Affected

This proposed regulation will specifically affect the town of Chase City.

Projected Impact on Employment

The proposed regulation is not expected to significantly affect employment.

Effects on the Use and Value of Private Property

The proposed changes are not expected to affect the use and value of private property.